

Now!
Work Order ID 101837

101837

Page 1

May-13-13 1:15:19 PM

Item ID: D3954-5

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Chain Lug

Start Date: 5/08/13 Start Qty: 12.00 *12*

Cust Item ID:

Required Date: 5/21/13 Req'd Qty: 12.00 *12*

Customer:

Reference:

Approvals: Process Plan: ML5

Date: 13-05-14 Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3954	D	0.00
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100		0.00
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100

Mill Conv

Conventional Milling Machine

Memo

mill to size

13/05/31

110

0.00

110

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg D3954

Dwg Rev: D

Prog Rev: D

2-Deburr if necessary

13 6

JM 3-5-31

PJO →

NCR: Yes / No

WORK ORDER NON-COMPLIANCE / UPDATE

DQA: *SWT* Date: *13/06/07*

Date: 13/06/07

QA Closed: all Date: 13/04/14

Work Order: <u>101837</u>	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D3954-5</u>	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input checked="" type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. <u>13.2704</u>	Scrap <input checked="" type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

FAULT CATEGORY

Landing Gear	General			
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input checked="" type="checkbox"/> Part Moved	
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset		
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions		<input type="checkbox"/> Other

Work Order ID 101837***101837***

Page 2

May-13-13 1:15:19 PM

Item ID: D3954-5

Accept

N900040100

Setup

Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Chain Lug

Start Date: 5/08/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/21/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00							Jm3-5-31
125 *125* Mill Conv Conventional Milling Machine	Memo Open hole using 0.748" reamer and mill as per Dwg	0.00 0.00							
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00							OAS 04 9-89

May 13/06/03

B.C.3 11

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____ NCR No. _____										
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other		

Work Order ID 101837***101837***

May-13-13 1:15:19 PM

Page 3

Item ID: D3954-5

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Chain Lug

Start Date: 5/08/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/21/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Date: Identify as per dwg & Stock Location: <i>W/A 001</i>	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* Packaging	Memo	0.00					11		<i>12</i>	<i>13-6-3</i>
Packaging										
150 *150* QC	QC21- Final Inspection - Work Order Release	0.00								
Quality Control	Memo	0.00								

*13/6/14 JF**13/6/14 JF*

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____ NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>	
										<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
										<input type="checkbox"/> Other	

Picklist Print

May-13-13 1:15:18 PM

Page 1

Work Order ID: 101837

Parent Item: D3954-5

Parent Item Name: Chain Lug

Start Date: 5/08/13

Required Date: 5/21/13

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 11.08.16 AS PER REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303B1.000X2.000 303 BAR 1" X 2"		Purchased	No			100	f	11.8477	0.5	6.3157896			

Location	Loc Qty	Loc Code
MAT049	11.8477	
121921	2.6467	
123701	9.201	

MAP 13/05/31

7, 114

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Part No. _____ NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>	
										<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
										<input type="checkbox"/> Other	

DART AEROSPACE LTD	Work Order:	101837
Description: Chain Lug	Part Number:	D3954-5
Inspection Dwg: D3954	Rev: C	Page 1 of 1

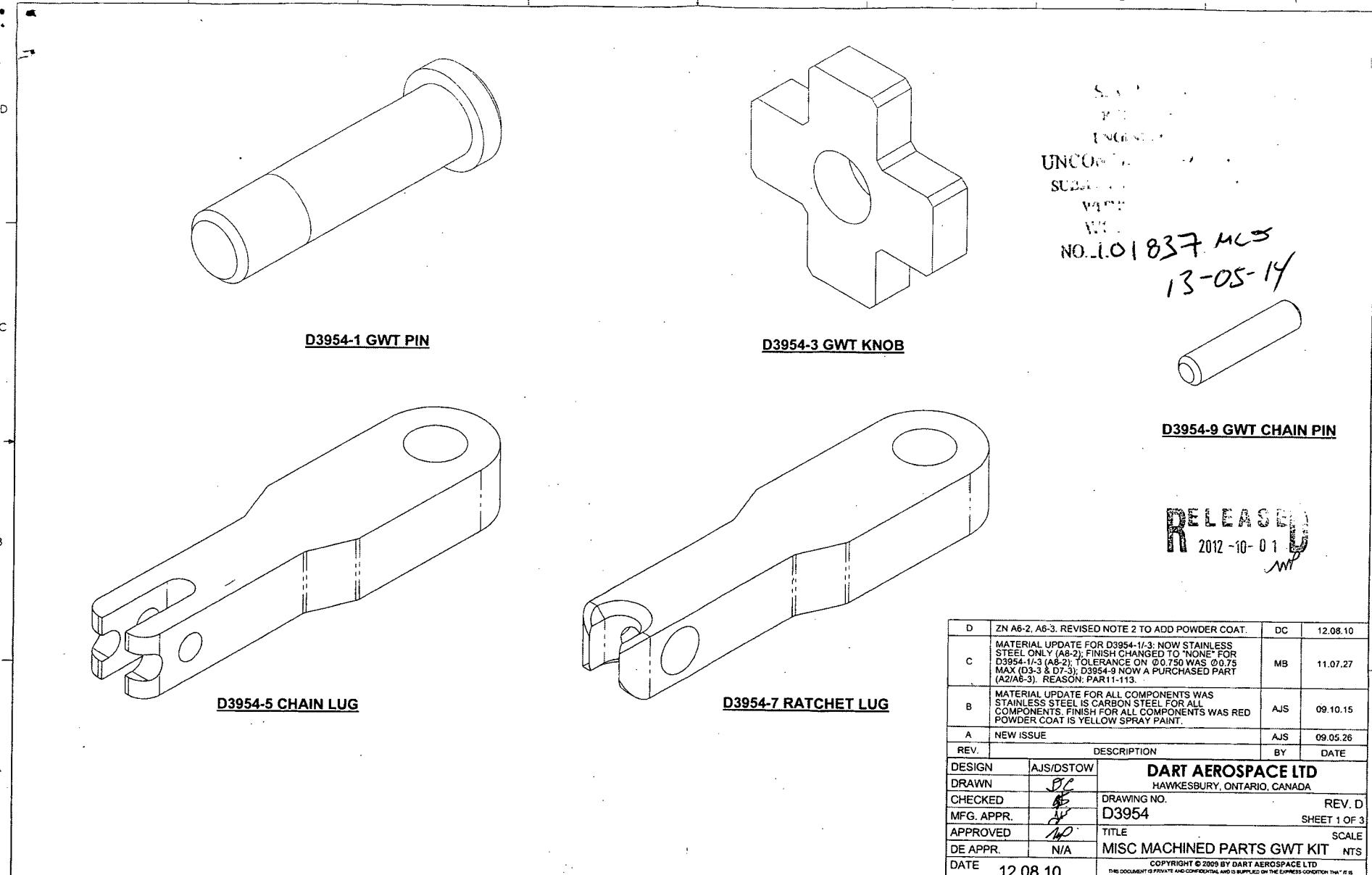
FIRST ARTICLE INSPECTION CHECKLIST

DAS

Measured by:	Jn	11/00	Audited by:	04 9-89	Preliminary Approval:	
Date:	13-3-1	13/06/03	Date:	3.6.3	Date:	

Rev	Date	Change	Revised by	Approved
A	09.06.11	New Issue	KJ	
B	09.11.04	Dwg Rev updated	KJ	
C	12.09.26	Dimensions updated per Dwg Rev C	KJ	 

6 7 6 5 4 3 2 1



D	ZN A6-2, A6-3. REVISED NOTE 2 TO ADD POWDER COAT.	DC	12.08.10
C	MATERIAL UPDATE FOR D3954-1-3. NOW STAINLESS STEEL ONLY (A8-2); FINISH CHANGED TO "NONE" FOR D3954-1-3 (A8-2). TOLERANCE ON Ø0.750 WAS Ø0.75 MAX (D3-3 & D7-3). D3954-9 NOW A PURCHASED PART (A2/A8-3). REASON: PAR11-113.	MB	11.07.27
B	MATERIAL UPDATE FOR ALL COMPONENTS WAS STAINLESS STEEL IS CARBON STEEL FOR ALL COMPONENTS. FINISH FOR ALL COMPONENTS WAS RED POWDER COAT IS YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.26
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS/DSTOW	DART AEROSPACE LTD	
DRAWN	BC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	BB	DRAWING NO.	REV. D
MFG. APPR.	AV	D3954	SHEET 1 OF 3
APPROVED	MD	TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT NTS	
DATE	12.08.10	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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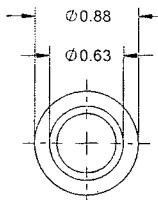
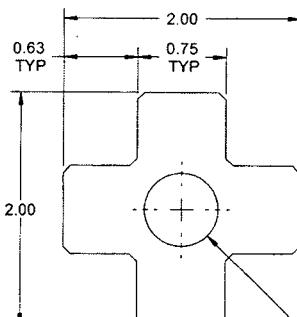
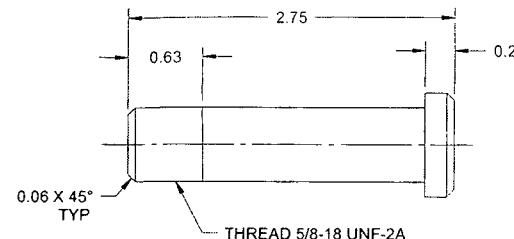
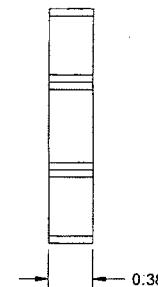
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3

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1

10/037

D3954-1 GWT PIND3954-3 GWT KNOB

NOTES:

- 1) MATERIAL -1: AISI 303/304/316 STAINLESS STEEL ROUND BAR
PER ASTM A582 (303) OR ASTM A276 (304/316)
REF DART SPEC M303R OR M304R
- 3: AISI 303/304/316 STAINLESS STEEL SHEET
PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M303S OR M304S
OR:
AISI 303/304/316 STAINLESS STEEL BAR OR AISI 304/316 PLATE
PER ASTM A582 (303) OR A276 (304/316) OR ASTM A240 (304/316)
REF DART SPEC M303B OR M304B
- 2) FINISH: SPRAY PAINT YELLOW WITH BERTRAND CG103IB PER DART QSI 005 4.2
OR POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT -1: 0.26 lbs
-3: 0.23 lbs

DESIGN	AJS/DSTOW	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
MFG. APPR.		REV. D
APPROVED		D3954
DE APPR.	N/A	SHEET 2 OF 3
DATE	12.08.10	TITLE MISC MACHINED PARTS GWT KIT NTS

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6

5

4

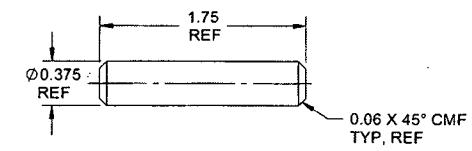
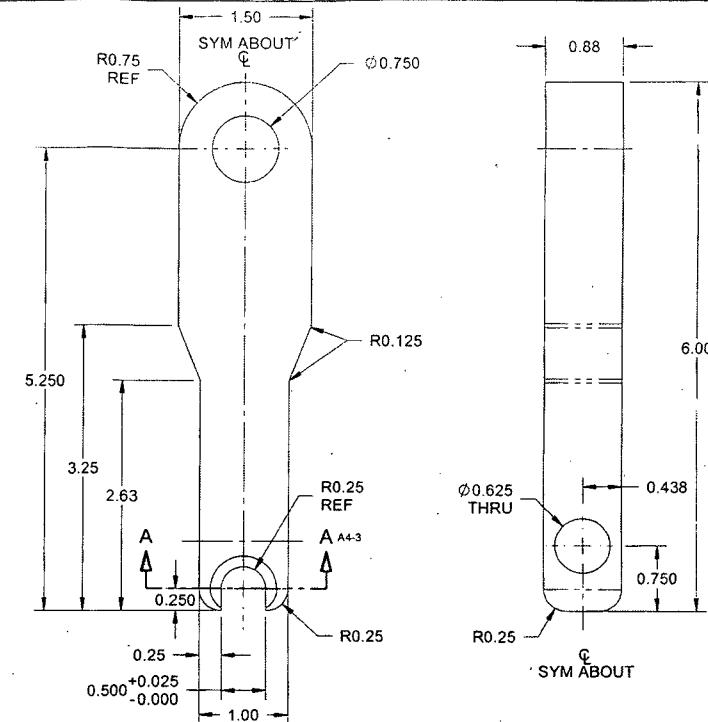
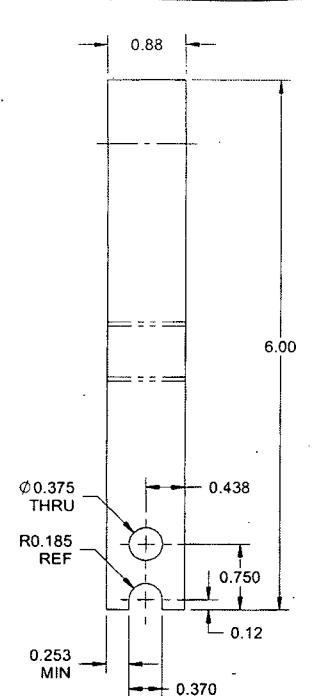
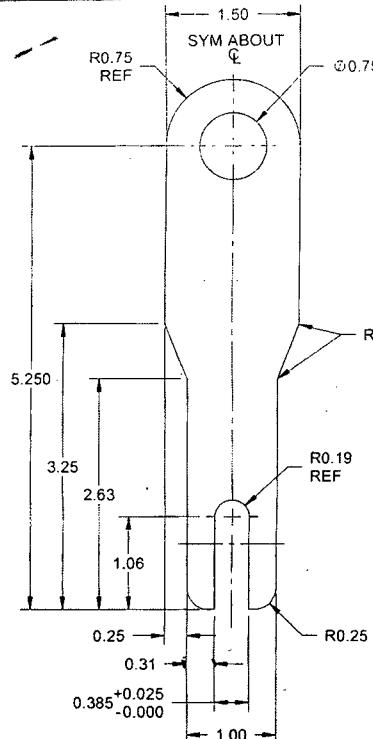
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2

1

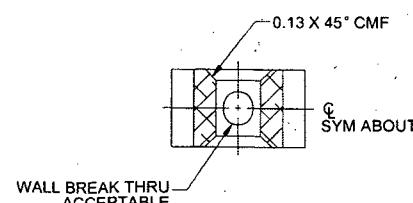
A

101837



NOTES:

- 1) MATERIAL:
-5/-7: AISI 1010-1025 MILD STEEL BAR
PER DART SPEC M1010-B
-9: PURCHASE PART FROM MCMASTER-CARR:
P/N 98381A630 (MILD STEEL)
- ALTERNATE MATERIAL:
-5/-7: AISI 303/316 STAINLESS STEEL BAR OR AISI 304/316 PLATE
PER ASTM A582 (303) OR A276 (304/316) OR ASTM A240 (304/316)
REF DART SPEC M303B OR M304B
- 9: PURCHASE PART FROM MCMASTER-CARR:
P/N 90145A630 (STAINLESS STEEL)
- 2) FINISH -7 ONLY: SPRAY PAINT YELLOW WITH BERTRAND CG103IB PER DART QSI 005 4.2
OR POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT -5/-7: 1.56 lbs EACH
-9: 0.05 lbs REF



DESIGN	AJS/DSTOW	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO.
MFG. APPR.		REV. D
APPROVED		D3954
DE APPR.	N/A	TITLE
		SHEET 3 OF 3
		MISC MACHINED PARTS GWT KIT
DATE	12.08.10	SCALE
		NTS
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